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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,420	12/13/2001	Zo-Chun Jen	5540-002	6337

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EXAMINER

AUGHENBAUGH, WALTER

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 01/16/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/017,420

Applicant(s)

JEN, ZO-CHUN

Examiner

Walter B Aughenbaugh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 and 14-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 7-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-6, drawn to a polyester bottle preform, classified in class 428, subclass 542.8.
 - II. Claims 7-13, drawn to a polyester bottle, classified in class 428, subclass 35.7.
 - III. Claims 14-20, drawn to a method for making polyester bottles, classified in class 264, subclass 37.1.
2. Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a preform for a hazy bottle and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.
3. Inventions III and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be

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made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by a materially different process such as a process for making a hazy polyester bottle preform.

4. Inventions III and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by a materially different process such as forming a polyester polymer containing an effective amount of barium sulfate as a friction reducing agent, and also containing an organic friction reducing agent such as the calcium, barium, zinc and manganese salts of dicarboxylic acids.

5. During a telephone conversation with William J. Mason on December 17, 2002 a provisional election was made with traverse to prosecute the invention of Group II, claims 7-13. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-6 and 14-20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

7. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 7 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regard to claim 7, the limitation “exhibiting reduced bottle-to-bottle friction” is indefinite. “Reduced” compared to what? The term “reduced” in claim 7 is a relative term which renders the claim indefinite. The term “reduced” is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

In further regard to claim 7, the limitation “an effective amount of barium sulfate” is indefinite. The term “effective” in claim 7 is a relative term which renders the claim indefinite. The term “effective” is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

In further regard to claim 7, the limitation “being characterized by an absence of visible haze” is indefinite. The phrase “an absence of visible haze” in claim 7 is a relative term which renders the claim indefinite. The phrase “an absence of visible haze” is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

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In regard to claim 12, the limitation "having an average particle size of from about 0.5 microns" is indefinite, because the range intended to be recited by the phrase "of from about 0.5 microns" is not clear. More or less than 0.5 microns?

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

11. Claims 7, 8 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Peiffer et al.

In regard to claim 7, Peiffer et al. teach a single layer film polyester film which has low haze and a low coefficient of friction (col. 3, lines 28-34 and 38-43). Peiffer et al. teach that the film is made of polyethylene terephthalate or modified polyethylene terephthalate (col. 4, lines 16-35). Peiffer et al. teach that it is known to produce bottles from polyester-containing films (col. 3, lines 13-21). Peiffer et al. teach that the film contains an antiblocking agent (i.e. a friction reducing additive) (col. 5, lines 5-7). Peiffer et al. teach that barium sulfate is a typical antiblocking agent (col. 5, lines 12-16). Peiffer et al. teach that the processing and reeling performance of the film on high speed machinery is extremely good as supported by the low coefficient of friction of the film of less than 0.5 (col. 8, lines 10-17). Due to the low coefficient of friction of the film, a bottle produced from the film would have a low coefficient of friction,

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and the bottle to bottle friction between bottles produced from the film would be accordingly low. Peiffer et al. further teach that the polyester film is chemically pretreated (via the addition of barium sulfate particles) to improve slip (col. 14, lines 43-47). Improved slip is another indication that bottle to bottle friction between bottles produced from the film would be low. Peiffer et al. teach that the film is transparent (col. 1, lines 5-6 and col. 11, line 41 and col. 12, line 27); therefore the film, and the bottle produced from the film, is characterized by an absence of visible haze.

In regard to claim 11, Peiffer et al. teach that the barium sulfate particles advantageously have a diameter greater than 1 micron (col. 5, lines 36-44). This teaching overlaps with the claimed range of "about 0.2 to about 1.0 micron".

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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13. Claims 9, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peiffer et al. ('663) in view of Peiffer et al. ('054).

Peiffer et al. ('663) teach the single layer polyester bottle as discussed above.

In regard to claims 9 and 12, Peiffer et al. ('663) teach that the barium sulfate particles advantageously have a diameter greater than 1 micron (col. 5, lines 36-44). This teaching overlaps with the claimed range of "about 0.1 to about 2.0 microns" of claim 9 and the claimed range of "from about 0.5 microns" of claim 12, where Examiner interprets "from about 0.5 microns" to recite "greater than 0.5 microns".

Peiffer et al. ('663) fail to teach a weight percentage of barium sulfate. Peiffer et al. ('054), however, disclose a film having at least a base layer and an outer layer that are both made of polyethylene terephthalate or modified polyethylene terephthalate (col. 7, line 58-col. 8, line 8 and col. 9, lines 5-6) and also include barium sulfate as an antiblocking agent (col. 9, lines 38-48). Peiffer et al. ('054) disclose that the film is transparent (col. 14, line 63) and does not block due to its low coefficient of friction (col. 13, lines 26-31 and Table 2, col. 19 and 20). Peiffer et al. ('054) disclose that the concentration of the barium sulfate is from 0 to 0.08% by weight (col. 9, line 65-col. 10, line 1) and claim that outer layer contains less than 0.02% by weight of the filler (i.e. barium sulfate). This limitation overlaps with each of the weight percentage limitations in claims 9, 11 and 12 of the instant application. Therefore, one of ordinary skill in the art would have recognized to have added a sufficient amount of barium sulfate to the polyester bottle of Peiffer et al. ('663) such that a barium sulfate concentration of from 0 to 0.08% by weight is attained in order to achieve a suitable low coefficient of friction along with transparency as taught by Peiffer et al. ('054).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added a sufficient amount of barium sulfate to the polyester bottle of Peiffer et al. ('663) such that a barium sulfate concentration of from 0 to 0.08% by weight is attained in order to achieve a suitable low coefficient of friction along with transparency as taught by Peiffer et al. ('054).


14. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peiffer et al. ('663) in view of Schiavone.

Peiffer et al. ('663) teach the single layer polyester bottle as discussed above. Peiffer et al. ('663) fail to teach that the bottle is a two-liter beverage container. Schiavone, however, discloses that polyester resins are widely used to produce two-liter soft drink containers (col. 1, lines 12-20). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have produced the polyester bottle of Peiffer et al. ('663) in the form of a two-liter soft drink container, as it is notoriously well known to use polyester resins to produce two-liter soft drink containers, as taught by Schiavone.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter B Aughenbaugh whose telephone number is 703-305-4511. The examiner can normally be reached on Monday-Friday from 9:00am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on 703-308-4251. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.


HAROLD PYON
SUPERVISORY PATENT EXAMINER
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

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